

**Work Order ID 59446**

Friday, June 04, 2010 11:24:31 AM



Page 1

Item ID: D5953

Accept



Setup Start



Revision ID:

Item Name: Saddle, 205

Stop



Start Date: 6/4/2010 Start Qty: 6.00



Cust Item ID:

Required Date: 6/10/2010 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan:



Date: 10-6-04 Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr	Revision Nbr
D5953	Rev B

100



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

6 3

DJR 10/06/23 MVA  
10/06/23

PTO

110



QC1- Inspect dimensions to dimension sheet

QC

Quality Control

Memo

0.00

DJR 10/06/23 MVA  
10/06/23

6 3

120



QC8- Inspect parts - second check

QC

Quality Control

Memo

0.00

SD 10/06/23

(6) (3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: 15953 PAR #: Fault Category: machined parts. NCR:  No DQA: Date: 10-06-25  
 Resolution: Scraps Disposition: Scraps QA: N/C Closed: Date: 10/07/01

NCR: 59446		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/06/23	100	Scrap first part on 4Axis. ↳ Plastic bore on 4Axis makes part crooked.  Cause by tooling.	Q 10-06-24 Q51042	Scrap and replace Btkh #58677  Remove plastic bore	MVA 10/06/24	Q 10/05/25	Q 10-06-24 Q51042	/
10-06-25	100	"	U 10-06-28	Above NCR resulted in a 2nd scrapping saddle (Q51041) Previous shaft did not run a next part & tooling/set-up was not adjusted.	10-06-24 MVA	Q 11/05/25	U 10-06-28 Q51042	/
10-06-25	100	Part scrap because machine crash and move vice, part was machine way off in X axis. Program proceeded to machine.  Cause bc wrong tooling origin.→	U 10-06-28	Scrap and replace Btkh #59621  (HAAS # 2. in keywords)	MVA 10-06-25	Q 10/05/25	U 10-06-28 Q51042	/

NOTE: Date & initial all entries tool hitting vice, operator did not notice. LCA.

**Work Order ID 59446**

Friday, June 04, 2010 11:24:31 AM



Page 2

Item ID: D5953

Accept



Setup Start



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Item Name: Saddle, 205

Stop



Start Date: 6/4/2010 Start Qty: 6.00



Cust Item ID:

Required Date: 6/10/2010 Req'd Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

130



HandFinish

Hand Finishing

Operation  
Description

Chemical Conversion Coat per QSI005 4.1

Set Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

140



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

M114841

Memo

0.00

START TIME:

2:35

OVEN TEMPERATURE:

320°

FINISH TIME:

3:05

6 Bl 10-6-30.

150



QC

Quality Control

QC3- Inspect Part Finish

0.00

=&gt; M 10/07/01

Memo

0.00

6 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 59446**

Friday, June 04, 2010 11:24:31 AM



Page 3

Item ID: D5953

Revision ID:

Item Name: Saddle, 205

Start Date: 6/4/2010 Start Qty: 6.00

Required Date: 6/10/2010 Req'd Qty: 6.00

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

160



Packaging

Packaging

Operation  
DescriptionIdentify as per dwg & Stock Location: Y30Set Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

170



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

P 10/7/01 (6)10/07/01 80C 10/7/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Friday, June 04, 2010 11:24:35 AM

Page 1

Work Order ID: 59446



Parent Item: D5953



Parent Item Name: Saddle, 205

Start Date: 6/4/2010

Required Date: 6/10/2010

Comments: IPP Rev:E Re-Format 05-11-29 JLM  
IPP Rev:f ecn 826 06.12.06 EC

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007		Manufactured	No			100	Each	52.0000	1	6			

Saddle Billet



Location	Loc Qty	Loc Code
MAT42	52	
46412	2	
58677	50	

*MJ 10/06/23*  
+3 B 59621 10/06/23  
6 DTP 10/06/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD				Work Order:	59444
Description: Inner Fwd Saddle				Part Number:	D5953
Inspection Dwg: D5953				Rev: B	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443			.440	.440	.440		
B	1.745	1.755			1.750	1.751	1.750		
C	5.245	5.255			5.250	5.248	5.249		
D	6.995	7.005			6.991	6.999	6.998		
E	5.240	5.260	5.250		5.240	5.248	5.248		
F	4.745	4.755	4.750		4.750	4.748	4.749		
G	0.315	0.322	0.321		.321	.321	.321		
H	1.522	1.532	1.527		1.527	1.528	1.526		
I	3.048	3.058	3.053		3.053	3.053	3.052		
J	4.575	4.585	4.580		4.580	4.582	4.579		
K	0.315	0.322	0.321		.321	.321	.321		
L	0.495	0.505	0.500		.500	.500	.500		
M	0.490	0.510	0.501		.499	.500	.499		
N	1.615	1.635	1.625		1.618	1.625	1.626		
O	7.990	8.010			8.003	8.002	8.001		
P	2.240	2.260			2.248	2.260	2.253		
Q	0.307	0.312			.304	.310	.310		
R	0.760	0.765				.760	.760		
S	0.490	0.510			.490	.505	.493		
T	1.375	1.395	1.385		1.388	1.391	1.388	1.389	
U	2.000	2.020			2.001	2.010	2.001	2.000	
V									
W									
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									
Accept/Reject									

Measured by:	<i>JK</i>	<i>WW</i>	Audited by:	<i>JK</i>	<i>JK</i>
Date:	10/06/23	10/06/23	Date:	10/06/23	10/06/23

Rev	Date	Change	Revised by	Approved
A	99.04.19	New Issue	RF	
B	02.12.13	Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B	KJ/RF	
C	06.12.06	Dimensions L,N,P revised	KJ/EC	
D	07.06.15	Dimension G revised	KJ/JLM	
E	08.04.21	Dimension E revised	KJ/DD	
F	08.12.01	Dimension K revised	KJ/DD	<i>JK</i>

DART AEROSPACE LTD			Work Order:	59444
Description: Inner Fwd Saddle			Part Number:	D5953
Inspection Dwg: D5953			Rev: B	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	5	6	7	8	By	Date
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.749	1.749	1.749	1.749		
C	5.245	5.255		5.248	5.248	5.249	5.250		
D	6.995	7.005		6.998	6.999	6.998	6.999		
E	5.240	5.260		5.248	5.248	5.248	5.248		
F	4.745	4.755		4.748	4.748	5.748	5.748		
G	0.315	0.322		.321	.321	.321	.321		
H	1.522	1.532		1.526	1.526	1.526	1.526		
I	3.048	3.058		3.052	3.053	3.053	3.053		
J	4.575	4.585		4.581	4.580	4.580	4.580		
K	0.315	0.322		.321	.321	.321	.321		
L	0.495	0.505		.500	.500	.500	.500		
M	0.490	0.510		.500	.500	.497	.497		
N	1.615	1.635		1.622	1.623	1.619	1.620		
O	7.990	8.010		8.003	8.002	8.001	8.001		
P	2.240	2.260		2.254	2.260	2.260	2.260		
Q	0.307	0.312		.308	.310	.309	.309		
R	0.760	0.765		.760	.760	.760	.760		
S	0.490	0.510		.501	.499	.499	.499		
T	1.375	1.395		1.388	1.391	1.385	1.386		
U	2.000	2.020		2.001	2.002	2.013	2.011		
V									
W									
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									
Accept/Reject									

Measured by:	MJ	Audited by:	JK
Date:	10/06/28	Date:	10/06/28

Rev	Date	Change	Revised by	Approved
A	99.04.19	New Issue	RF	
B	02.12.13	Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B	KJ/RF	
C	06.12.06	Dimensions L,N,P revised	KJ/EC	
D	07.06.15	Dimension G revised	KJ/JLM	
E	08.04.21	Dimension E revised	KJ/DD	
F	08.12.01	Dimension K revised	KJ/DD	M

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

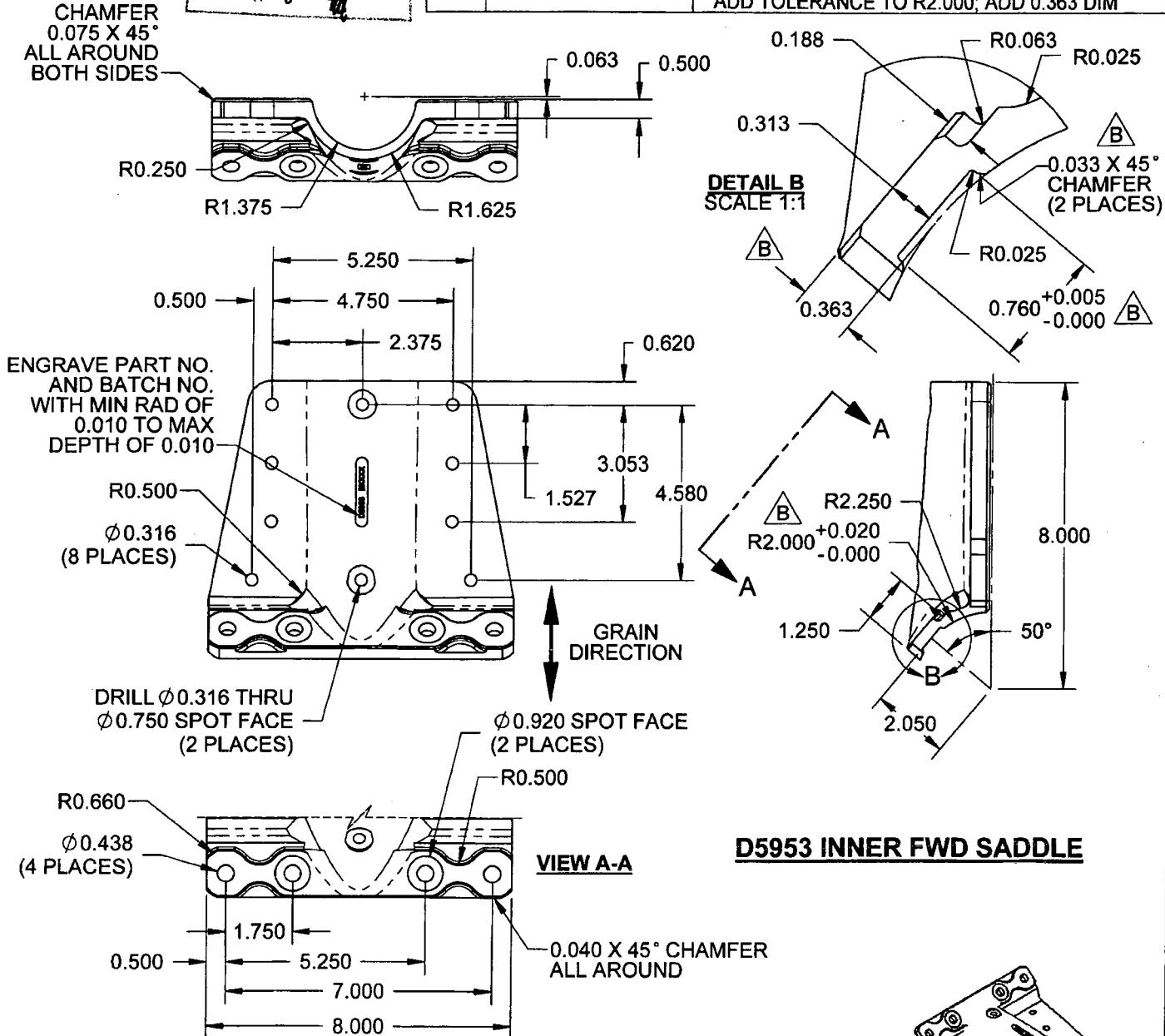
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED  
SUBJECT TO  
WITHOUT NOTICE  
WORK ORDER

DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED CE	APPROVED TH	DRAWING NO. D5953	REV. B	SHEET 1 OF 1
DATE 06.11.07		TITLE INNER FWD SADDLE	SCALE 1:4	
REV	DATE	DESCRIPTION		
A	97.05.06	NEW ISSUE		
B	06.11.07	INCORPORATE DEO 9102, DEO 9079; ADD 0.363 DIMENSION; Ø 0.316 WAS Ø 0.313; ADD TOLERANCE TO R2.000; ADD 0.363 DIM		

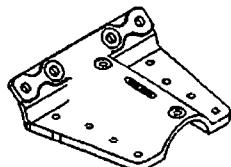


## **D5953 INNER FWD SADDLE**

**NOTES:**

**NOTES:**

- 1) MATERIAL: ALUMINUM 7075-T7351 PER QQ-A-250/12  
(MAKE FROM D6101-007 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3 
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.010 TO 0.020



**ISOMETRIC VIEW**

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries